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By Kentaro Tamura
and Evangelos Tabakis

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By Kentaro Tamura and Evangelos Tabakis[1]

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CONTENTS

ABSTRACT 4

NON-TECHNICAL SUMMARY 5

1 INTRODUCTION 7

2 IMPORTANCE OF CREDIT CLAIMS IN THE EURO AREA 10

2.1 NFC financing structure in the euro area 10
2.2 Components of collateral accepted by the Eurosystem 12

3 ELIGIBILITY AND PRACTICES CONCERNING THE USE OF CREDIT CLAIMS AS COLLATERAL 15

3.1 Eurosystem credit assessment framework 15
3.2 Eligibility criteria for credit claims set by major central banks 17
3.3 Operational aspects of the use of credit claims as collateral 19
3.4 Eurosystem practices concerning the use of credit claims as collateral 21

4 CENTRAL BANK MEASURES RELATING TO CREDIT CLAIMS 23

5 PUBLIC AND PRIVATE INITIATIVES ON THE USE OF CREDIT CLAIMS 26

5.1 Public initiatives: the EU financial collateral directive 26
5.2 Private initiatives facilitating the use of credit claims 27

6 SYNDICATED LOAN MARKET IN THE EURO AREA 30

6.1 European syndicated loan market: an overview 30
6.2 The use of syndicated loans as collateral 35

7 CONCLUSION 37

REFERENCES 38

ABSTRACT

Credit claims (or bank loans) represent a large share of the collateral accepted by the Eurosystem in its credit operations in recent years. Hence the techniques and procedures used in the use of credit claims as collateral have become significant elements of the monetary policy implementation mechanism in the euro area. The procedures involved in credit claim collateralisation, however, are generally more complex than those for marketable assets traded in regulated markets or in other markets accepted by the Eurosystem. While several types of credit claims are eligible as Eurosystem collateral, each type of credit claim has different characteristics which require specific considerations in the eligibility assessment. This paper provides an overview of the issues involved in the use of credit claims as collateral and relates these to some measures taken by both the public and the private sector aimed at facilitating their use in the euro area. The paper also elaborates on the syndicated loan market in the euro area as this market is sizeable, while it appears that the use of such loans as collateral remains limited.

JEL codes: E58, G30

Keywords: credit claim, syndicated loan, central bank collateral eligibility

NON-TECHNICAL SUMMARY

The Eurosystem accepts credit claims as collateral in its credit operations in several forms. Credit claims (more commonly referred to as "bank loans") represent a large share of the collateral accepted by the Eurosystem. The term "credit claims" is defined in the EU's Financial Collateral Directive as pecuniary claims arising out of an agreement whereby a credit institution grants credit in the form of a loan. The Eurosystem accepts several types of credit claim as collateral. In addition to those credit claims fulfilling the eligibility criteria of the Eurosystem, other credit claims are also indirectly accepted as collateral in the form of underlying assets of asset-backed securities (ABSs) or covered bonds. Syndicated loans are also in principle accepted as collateral, but their use so far has been limited.

The scope for accepting eligible credit claims has furthermore been expanded by the additional credit claims (ACC) framework that was implemented in December 2011 as a temporary measure whereby other types of credit claims, such as residential mortgages or pools of credit claims, became eligible in certain euro area jurisdictions under additional specific criteria.

The costs of collateralisation of credit claims are high and measures have been adopted to reduce these costs. Unlike marketable securities, credit claims are normally tailored to the borrower's needs, so they are quite diverse in structure. Regarding their use as collateral, some legal and operational requirements concerning their use as collateral could increase the cost of their use compared with marketable assets. The relatively high cost of collateralisation can also be partly observed in the eligibility criteria set by major central banks which might reflect some legal requirements for mobilisation in each jurisdiction. The limited availability of ratings and difficulties in the valuation of credit claims in some jurisdictions are also considered as major factors making the use of credit claims as collateral rather challenging.[1] While the costs of their use as collateral remain generally higher than those of marketable assets, several measures aiming to alleviate the costs have been taken by the Eurosystem, legislators and the private sector. These include: (i) the implementation of relatively automated procedures for the use of credit claims as collateral by some euro area national central banks (NCBs); (ii) the introduction of a framework for the cross-border use of credit claims by the Eurosystem; (iii) the revision of the EU's Financial Collateral Directive in 2009 extending its protection to credit claims and abolishing some formal requirements for mobilisation; and (iv) private initiatives such as documentation standardisation for syndicated loans. International central securities depositories (ICSDs) are also understood to be working to enhance the post-trade services for credit claims. Market-wide approaches aimed at encouraging the use of credit claims in the secondary market have also been observed in the last years.

Among the credit claims accepted by the Eurosystem, syndicated loans have particular features. A syndicated loan is a loan provided to a debtor by a group of lenders in a lending syndicate. The outstanding amount of syndicated loans in the euro area is sizeable, at more than €500 billion in December 2012. The debtor profile is different as syndicated loans are normally used as alternatives to corporate bond financing and are mainly used to meet large debt financing needs. The existence of a secondary market also differentiates syndicated loans from other types of credit claim. While these are positive elements for syndicated loan transactions, syndicated loans are not necessarily actively used as collateral either in private transactions or in Eurosystem credit operations as suggested by some counterparties. The modest use of syndicated loans might partly

1 The Governing Council of the ECB announced in December 2011 that "the Eurosystem is aiming to enhance its internal credit assessment capabilities, and encourage potential external credit assessment providers and commercial banks that use an internal ratings-based system to seek Eurosystem endorsement under the Eurosystem Credit Assessment Framework."

reflect the particular structures of these loans which might not meet some eligibility criteria applied for credit claims in general. For instance, restrictions on transferability are generally considered as a reason not to accept loans as collateral, and most syndicated loans contain some form of restriction on transferability. The inclusion of such restrictions could reflect the particular characteristics of these loans that are often described as hybrid instruments combining features of publicly traded debt and relationship lending.

The use of credit claims has increased since they were included in the Eurosystem's single list of eligible collateral in 2007. Thus, credit claims have been gaining importance as collateral in the euro area. In the light of their increased importance, it is worth revisiting the practices concerning the use of credit claims as collateral.

I INTRODUCTION

Credit claims are pecuniary claims arising out of an agreement whereby a credit institution grants credit in the form of a loan, as defined in the EU's Financial Collateral Directive (Article 2). Credit claims were first included in the single list of Eurosystem collateral accepted for credit operations in the category of non-marketable assets[2] in 2007. Since their inclusion in the single list, the usage of credit claims as collateral has been constantly increasing. Credit claims are normally tailored to the borrower's needs, hence the structure of credit claims is diverse and the collateralisation practices are different from those of marketable assets. This paper sheds some light on this instrument and the difficulties in – but also potential gains from – its usage as collateral.

The importance of credit claims from a monetary policy implementation perspective is evident when looking at the types of asset used as collateral with the Eurosystem, among which credit claims account for the largest share of the collateral accepted in 2012. In December 2011, as a temporary measure the Eurosystem implemented the additional credit claims (ACC) framework aiming to temporarily expand the use of credit claims as collateral so as to increase collateral availability to counterparties. The use of credit claims as collateral is generally perceived by counterparties as costly compared with marketable assets. This might stem from the legal requirements for mobilisation or transfer set by national legislations, the relatively limited availability of credit ratings for the debtors in some jurisdictions, operational requirements imposed by collateral takers (e.g. central banks) and/or relatively less automated procedures for collateralisation compared with those for marketable assets.

These specific issues related to the use of credit claims as collateral have been highlighted and examined on several occasions. For instance, European Central Bank (2006) presented some general issues concerning the use of credit claims as collateral before their inclusion in the single list of the collateral framework in 2007. Sauerzopf (2007) describes the collateralisation practices after their inclusion in the single list, as well as related legal issues. European Commission (2008) introduces and examines the legal issues related to the use of credit claims as collateral, including those for the cross-border use in the euro area, which preceded the revision of the EU's Financial Collateral Directive in 2009. The practices for cross-border use of credit claims are explained in European Central Bank (2011a). Issues related to the use of credit claims as collateral have also been discussed in the ECB contact groups with market participants, such as the Money Market Contact Group (MMCG) and the Contact Group on Euro Securities Infrastructures (COGESI). The relevant summaries of meetings can be found on the ECB's website (http://www.ecb.europa.eu). While these sources describe several issues related to the use of credit claims as collateral in the euro area, this paper seeks to provide a comprehensive overview of the topic, taking into account the recent developments in this field. The paper also provides a brief comparison of the collateralisation of credit claims in major central banks, namely the Eurosystem, the US Federal Reserve, the Bank of England and the Bank of Japan. Particular attention is given to the syndicated loan market in the euro area. While this market is sizeable, syndicated loans are used as collateral to a rather limited extent due to their specific legal and economic features.

2 The single list of collateral is a single framework for eligible assets common to all Eurosystem credit operations. As stipulated in European Central Bank (2011b) (hereafter also referred to as the "General Documentation"), the single list comprises two distinct asset classes: marketable assets and non-marketable assets. In addition to credit claims, fixed-term deposits from eligible counterparties and non-marketable retail mortgage-backed debt instruments (RMBDs) are non-marketable assets which are eligible as collateral in the single list. Within the single list, no distinction is made between the two asset classes with regard to the quality of the assets and their eligibility for the various types of Eurosystem monetary policy operation, except that non-marketable assets are not used for outright transactions.

The paper is structured as follows. Section 2 describes the importance of credit claims in the euro area by referring to the financial structure of non-financial corporations (NFCs) and the types of collateral accepted by the Eurosystem. Section 3 presents the legal and operational challenges concerning the use of credit claims as collateral. Section 4 introduces recent measures concerning credit claims taken by central banks. Section 5 describes the recent initiatives of the public and private sectors aimed at facilitating the usage of credit claims. Section 6 focuses on the syndicated loan market in the euro area and Section 7 concludes by highlighting the potential implications of this analysis for the use of credit claims as collateral.

Box 1

EUROSYSTEM COLLATERAL FRAMEWORK: ELIGIBIILITY CRITERIA

All Eurosystem liquidity-providing operations, such as the main refinancing operations (MROs) or the longer-term refinancing operations (LTROs), must be based on "adequate collateral". The adequacy of collateral is required by Article 18.1 of the Protocol on the Statute of the European System of Central Banks and of the European Central Bank: "In order to achieve the objectives of the ESCB and to carry out its tasks, the ECB and the national central banks may conduct credit operations with credit institutions and other market participants, with lending being based on adequate collateral."

The concept of the adequacy of collateral has two notions. First, collateral must be able to protect the Eurosystem from incurring losses in its credit operations. Second, there must be sufficient collateral potentially available to ensure that the Eurosystem can carry out its tasks. These notions, as well as the related operational framework, are enshrined in the Guideline of the European Central Bank on monetary policy instruments and procedures of the Eurosystem, which is often referred to as the "General Documentation".[1]

Among the major central banks, the Eurosystem accepts a broader range of collateral for its open market operations. As Cheun et al. (2009) note, the Eurosystem and the Bank of Japan accept a broad range of both public and private sector claims as collateral for their regular open market operations, applying varying risk control measures (e.g. higher haircuts for private assets), whereas the US Federal Reserve, the Bank of England and the Bank of Canada tend to accept only liquid assets with high credit quality. Cheun *et al.* point out that the different approaches taken by the major central banks could be affected by external factors such as "the statutory requirements and the structure and development of domestic capital markets and the local banking sector". As regards the background of the Eurosystem collateral framework accepting a broad range of assets, Cœuré (2012) points out three factors: (i) the large number of eligible counterparties; (ii) the heterogeneity of financial markets in Europe; and (iii) the differences in business models of European banks.

The Eurosystem eligible collateral set is divided into two distinct asset classes: marketable assets (securities) and non-marketable assets. Credit claims are categorised in non-marketable assets.

1 European Central Bank (2011b). For the latest amendment, see also the Guideline of the ECB of 26 November 2012 amending Guideline ECB/2011/14 on monetary policy instruments and procedures of the Eurosystem (ECB/2012/25).

The following table includes the main criteria applied to marketable and non-marketable assets. It does not include the extension of eligible collateral announced on 8 December 2011 through the introduction of the ACC framework, which is described in Section 4 of this paper:

General eligibility criteria for Eurosystem collateral [1)]

	Marketable assets	Non-marketable assets [2)]
Asset type	Debt securities (e.g. ABSs, covered bonds, corporate bonds, uncovered bank bonds, government bonds) with (a) a fixed and unconditional principal amount (except for ABSs) and (b) a coupon that cannot result in a negative cash flow	Credit claims (bank loans) with (a) a fixed and unconditional principal amount and (b) an interest rate that cannot result in a negative cash flow
Accepted credit assessment systems	Moody's, Fitch, S&P and DBRS (external credit assessment institutions or ECAIs). Other credit assessment sources are available for unrated assets	
Credit standards	ECAI rating threshold (long-term): BBB- (Fitch, S&P), Baa3 (Moody's), BBB (DBRS). Other credit assessment sources shall not exceed a 1-year probability of default of 0.4%	
Place of issue	European Economic Area (EEA)	Not applicable
Type of issuer, debtor and guarantor	NCBs, public sector, private sector, international and supranational institutions	Public sector, NFCs, international and supranational institutions
Place of establishment of the issuer, debtor and guarantor	Issuer: EEA or non-EEA G10 countries (US, CH, JP, CA) Debtor: EEA Guarantor: EEA	Euro area
Currency	Euro	Euro
Minimum size	Not applicable	Minimum size of threshold at the time of submission of the credit claim: for domestic use, choice of the NCB, and for cross-border use, common threshold of €500,000
Governing laws	For ABSs, the acquisition of the underlying assets must be governed by the law of an EU Member State. The law governing underlying credit claims must be the law of an EEA country	Governing law for credit claim agreement and mobilisation: law of an EU Member State. The total number of different laws applicable to (a) the counterparty; (b) the creditor; (c) the debtor; (d) the guarantor (if relevant); (e) the credit claim agreement; and (f) the mobilisation agreement, shall not exceed two

1) Tabakis and Espargilière (2012) and Guideline of the ECB of 26 November 2012 amending Guideline ECB/2011/14 on monetary policy instruments and procedures of the Eurosystem (ECB/2012/25).
2) Eligibility criteria for other non-marketable assets (e.g. RMBDs) are not shown in the table.

2 IMPORTANCE OF CREDIT CLAIMS IN THE EURO AREA

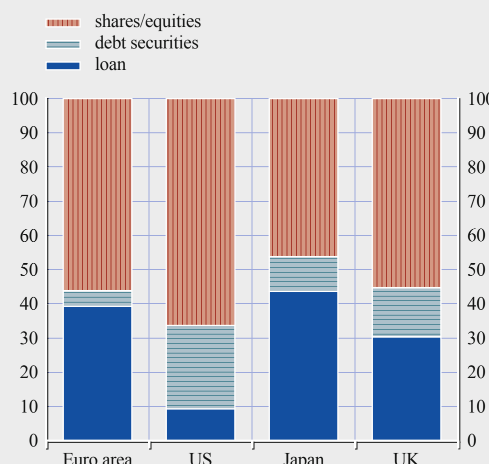
The importance of credit claims in the euro area is evident both in the financing structure of NFCs[3] and in the percentage share of credit claims in the total collateral used in Eurosystem credit operations.

2.1 NFC FINANCING STRUCTURE IN THE EURO AREA

A comparison of the financing structures of the NFCs in major economies provides a clear picture of the importance of credit claims as a stable funding source for the euro area economy. Unlike in the case of the United States where the NFCs rely on bank loans (credit claims) for less than 10% of total equity and debt financing, the NFCs in the euro area and Japan rely on bank financing for about 40% of their financing needs (see Chart 1). The country breakdown of data on the NFC financing structure in the euro area shows considerable differences in the share of loan financing in total financing including equity financing (see Chart 2). For instance, the share of equity

Chart 1 Financing structures of NFCs in the euro area, the United States, Japan and the United Kingdom (September 2012)

(shares in percentages)



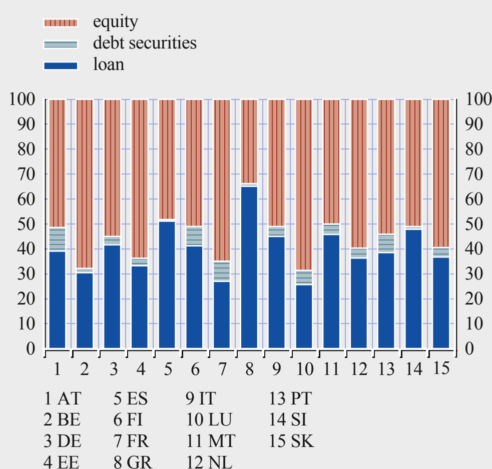
Sources: ECB, Federal Reserve, Bank of Japan, Haver Analytics and Office for National Statistics.

3 Credit claims extended to households are not eligible as Eurosystem collateral (except for those made eligible under the ACC framework described in Section 4 of this paper). The debtors of eligible credit claims are non-financial corporations, public sector entities and international or supranational institutions.

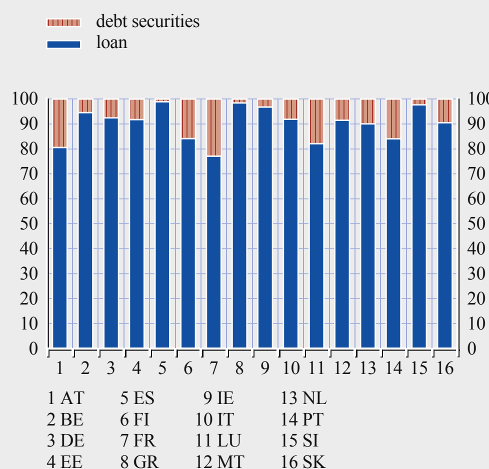
Chart 2 Financing structures of NFCs in the euro area (September 2012)

(shares in percentages)

a) Financing structure of NFCs in the euro member countries



b) Debt financing structure of NFCs in the euro member countries



Source: ECB.

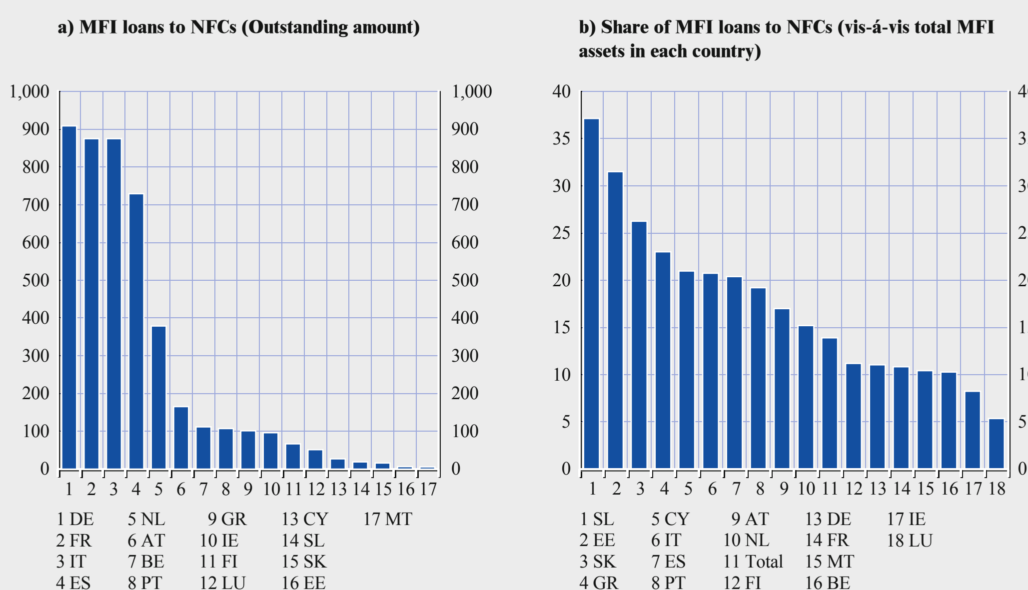
financing reaches about 70% in Luxembourg and Belgium, while in Greece and Spain it remains below 50%. When focusing on the share of debt financing, which consists of assets potentially eligible as Eurosystem collateral, the importance of credit claims becomes evident throughout the euro area (see Chart 2). Even in France, Luxembourg and Austria, where NFCs rely less on bank loan financing compared with other euro area countries, the shares of bank loan financing are still around 80% of debt financing. The average share of credit claim financing in total debt financing in the euro area reaches about 90%. According to European Central Bank (2012), bank financing (i.e. bank loans, bank overdrafts and credit lines) is the most important source of external financing for small and medium-sized enterprises (SMEs) in the euro area.[4]

The importance of credit claims in the euro area can also be confirmed by looking at the supply side of the NFCs' financing. Germany, Italy, France and Spain are the countries where MFIs provide the highest amount of lending to NFCs reflecting the size of each economy in the euro area. The share of lending to NFCs in monetary financial institutions' (MFIs) total assets might shed light on the importance of credit claims from a different angle. The shares are high in relatively small economies in the euro area, with the share in Slovenia and Estonia exceeding 30% for instance, while the average share in the euro area is around 15% (see Chart 3). The share also differs even among the four big economies. While the share of MFI lending to NFCs in total MFI assets in Germany and France stands at around 10%, the shares in Spain and Italy exceed 20%.

4 European Central Bank (2012) shows that the share of SMEs using bank financing was 74% (33% for bank loans and 41% for bank overdrafts/credit lines) during the survey period between April 2012 and September 2012. Other external financing sources include trade credit and leasing. The survey covers 7,514 firms in the euro area, 6,959 of which had less than 250 employees.

Chart 3 MFI loans to NFCs in the euro area (December 2012)

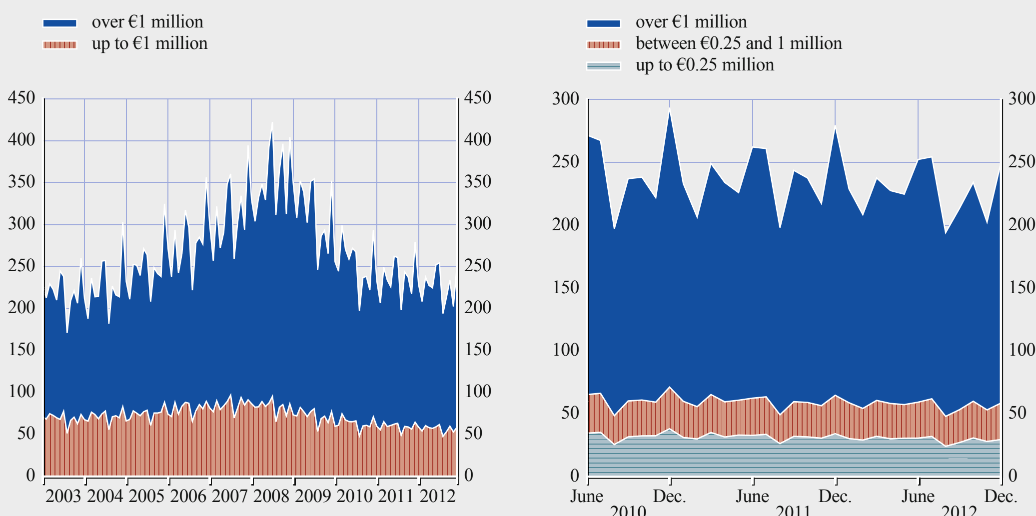
(EUR billion; percentages)



Source: ECB.

Chart 4 MFI loans to NFCs in the euro area by loan size (December 2012)

(EUR billion)



Source: ECB

The data on MFI lending indicate that about 25% of MFI loans provided are smaller than €250,000 and the share has been more or less unchanged for years, implying the importance of credit claims as a stable funding source for the SMEs in the euro area (see Chart 4).[5] The outstanding amounts of credit claims have been declining in most countries since 2008, except in Germany and France. For instance, MFI loans in Spain have been continuously declining to a level well below that of early 2008, a fact, however, which might also reflect general macroeconomic developments and not a general change of financing patterns.

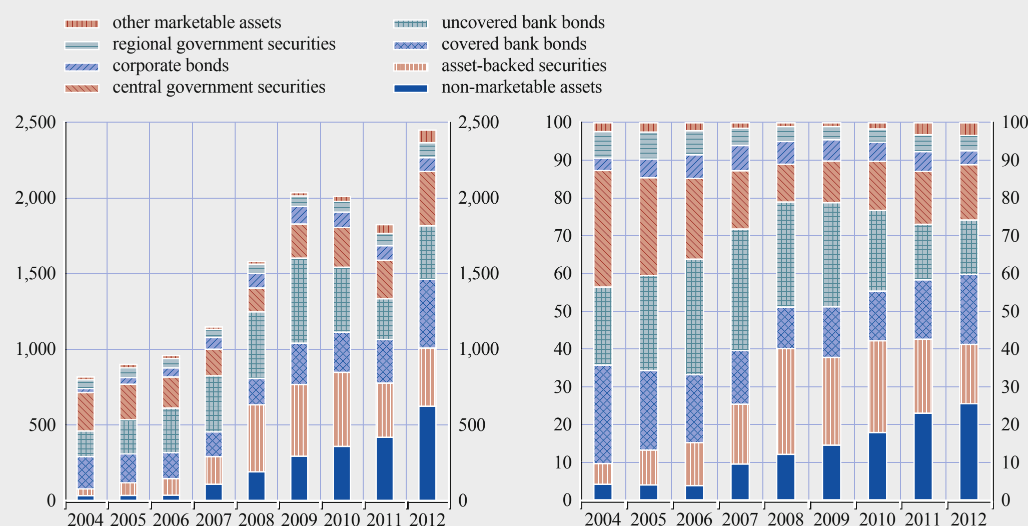
2.2 COMPONENTS OF COLLATERAL ACCEPTED BY THE EUROSYSTEM

The significance of credit claims in the euro area can be further confirmed by the data on collateral accepted by the Eurosystem, with non-marketable assets representing the highest shares of collateral used recently by the Eurosystem's counterparties (see Chart 5). The composition of collateral accepted by the Eurosystem has changed markedly over the recent years. The share of non-marketable assets increased from below 5% in 2004 to around 25% in 2012, the highest figure of all, with covered bank bonds and ABSs being the second and third largest asset categories deposited as collateral. The share of credit claims accepted on a stand-alone basis in the total amount of collateral accepted by the Eurosystem was 18.1% in 2011 and 19.6% in 2012 (average of end-month data), which was the second largest share in 2011 and the largest in 2012. Taking into account the amount of credit claims accepted as underlying assets of covered bonds as well as ABSs, the importance of credit claims from a monetary policy implementation perspective in the euro area is evident.

5 European Central Bank (2013) indicates that the overall tightening of credit standards applied more to large enterprises than to SMEs. For instance, the percentages of net tightening of credit standards for SMEs were 12% in the fourth quarter of 2012 compared with 11% in the third quarter, whereas those for large firms were 15% and 17% respectively.

Chart 5 Categories of collateral pledged to the Eurosystem

(EUR billion; percentages)



Source: ECB.
Notes: The data are averages of end-month data over each time period (after valuation/haircuts). Non-marketable assets include credit claims accepted on a stand-alone basis, fixed-term deposits and non-marketable retail mortgage-backed debt instruments.

The counterparties' use of credit claims has been continuously increasing since 2007 when the Eurosystem included credit claims in the single list of collateral.[6] Prior to their inclusion in the single list, a two-tier system was in place. Under the former two-tier system, tier one assets comprised debt instruments that complied with euro area common eligibility criteria, whereas tier two assets comprised assets that were approved by Eurosystem NCBs which did not comply with euro area-wide eligibility criteria at that time. Credit claims belonged to the tier two assets, with few NCBs accepting this type of asset (i.e. the NCBs of Austria, France, Germany, the Netherlands and Spain did). The heterogeneous treatment of credit claims was perceived as undermining the level playing field in the euro area. The low opportunity cost of credit claims as collateral, together with the large amounts of unencumbered credit claims and their high credit quality, were pointed out as reasons to include this asset class in the single list.[7] The low opportunity cost of using credit claims as collateral could be one of the main reasons for the inclusion of these assets in the single list of collateral as counterparties had few alternative options to use credit claims, other than securitisation or selling them to other parties. The inclusion of credit claims in the single list was also expected to have a general positive impact on the financial system of the euro area. As European Central Bank (2006) notes, it was expected to encourage the smooth functioning of the TARGET payment system by increasing the liquidity of an entire asset class, thereby fostering the smooth functioning of the financial system in the euro area, and even to indirectly foster "analogous developments in private transactions".

With regard to the increased reliance on credit claims, one could also assume that the counterparties had incentives to submit relatively illiquid assets, such as loans or the ABSs originated by them,

6 See European Central Bank (2006) for detailed information on the single list in the Eurosystem collateral framework.
7 European Central Bank (2006).

to the Eurosystem, while keeping more liquid assets such as government bonds for their private repo transactions. This can be understood also as the result of the higher level of tolerance against liquidity shocks that central banks can afford to have compared with other market participants. However, with the financial and the subsequent sovereign debt crisis, some counterparties became more reliant on Eurosystem liquidity provision and even faced an overall shortage of collateral amid the rating downgrades of sovereigns or the market speculation about downgrades which put downward pressure on collateral value. This resulted in a reduction of the collateral base for the private repo and interbank markets, which consequently led to the increase of central and regional government securities deposited with the Eurosystem as collateral as some securities reportedly became difficult to place in private transactions. The importance of credit claims as collateral accepted by the Eurosystem could be compared with that of the Bank of Japan which also utilises collateralised lending as one of its main policy tools, together with outright transactions.[8] The share of credit claims accepted on a stand-alone basis in total collateral stands at around 4% for the Bank of Japan for the same period.[9]

8 As European Central Bank (2007) notes, unlike the Eurosystem and the Bank of Japan, the US Federal Reserve conducts its monetary policy operations mostly via outright transactions. The collateralised lending is basically utilised for emergency liquidity provision purposes. This trend was strengthened further in late 2008 when the US Federal Reserve initiated a series of large-scale asset purchases (LSAPs). The shares of collateralised lending in total assets of major central banks in December 2012 were 0.02% for the US Federal Reserve (loans in total factors supplying reserve funds), 1.5% for the Bank of England (longer-term sterling reverse repos in total assets), 19% for the Bank of Japan (loans in total assets) and 44% for the Eurosystem (lending to euro area credit institutions plus other claims on euro area credit institutions in total assets).

9 Japanese government securities account for the largest share of the collateral accepted by the Bank of Japan (70% in December 2012, after haircuts).

3 ELIGIBILITY AND PRACTICES CONCERNING THE USE OF CREDIT CLAIMS AS COLLATERAL

The relative difficulties in the use of non-marketable credit claims as collateral, compared with the use of marketable assets, set these assets apart. These characteristics were described in European Central Bank (2006), which was published before the Eurosystem included credit claims in the single list of collateral in 2007. The following features were pointed out as creating legal and operational challenges for the Eurosystem when accepting credit claims as collateral: (i) a lack of standardisation; (ii) limited availability of rated debtors of credit claims; (iii) restrictions on the transferability of credit claims; (iv) limited liquidity/no existence of a secondary market in credit claims; (v) legal uncertainty concerning the existence of credit claims; and (vi) set-off risk.[10] The above characteristics can be divided into: (1) valuation/credit risk-related issues (ii, iv); and (2) legal and operational issues (i, iii, v, vi).

3.1 EUROSYSTEM CREDIT ASSESSMENT FRAMEWORK

With regard to the valuation/credit risk issues, the Eurosystem accepts four alternative sources for credit assessment under the Eurosystem credit assessment framework (ECAF). Under the ECAF, counterparties can theoretically use: (i) external credit assessment institutions (ECAIs); (ii) counterparties' internal ratings-based (IRB) systems; (iii) third-party providers' rating tools; and (iv) NCBs' in-house credit assessment systems (ICAS). However, the availability of credit assessments for debtors of credit claims is limited in practice and therefore further efforts are needed to improve the situation. For instance, IRB systems exist mainly in large financial institutions with sophisticated credit risk assessment capabilities. ICAS are currently only available at a few NCBs.[11] Usage of third-party rating tools is also limited as few of these are accepted by the Eurosystem. With the limited availability of debtors/guarantors rated by ECAIs (in particular SMEs), smaller banks that are not the counterparties of the five NCBs that operate an ICAS face difficulties in collateralising credit claims against domestic debtors. In this context, the Governing Council of the ECB announced its aim to enhance its internal credit assessment capabilities[12] and to encourage the use of other credit assessment sources, together with the introduction of the ACC framework, which is discussed in Section 4.

10 Set-off is a legal counterclaim against the plaintiff (e.g. creditor) with the effect of diminishing the amount the defendant (e.g. debtor) would have to pay. European Commission (2008) notes that the possible exercise of set-off by the debtor of the credit claim provided as collateral could discourage the use of credit claims as collateral. This is because "the collateral can as such disappear if the debtor exercises set-off right vis-à-vis the creditors of the credit claim and vis-à-vis persons to which the creditors assigned, pledged or otherwise mobilised the credit claim as collateral."

11 ICAS for non-financial corporations were available at the NCBs of Germany, France, Spain, Austria and Slovenia as at January 2013.

12 See the ECB press release of 8 December 2011, which states that "the Eurosystem is aiming to enhance its internal credit assessment capabilities and encourage potential external credit assessment providers (rating agencies and providers of rating tools), and commercial banks that use an internal ratings-based system, to seek Eurosystem endorsement under the Eurosystem Credit Assessment Framework."

Box 2

RISK CONTROL MEASURES FOR CREDIT CLAIMS

Risk control measures are applied to the assets underlying Eurosystem credit operations in order to protect the Eurosystem against the risk of financial loss if underlying assets have to be realised owing to the default of a counterparty. The Eurosystem currently applies the following measures for its eligible collateral (see European Central Bank (2011b), Box 7):

a) Valuation haircuts: The Eurosystem applies "valuation haircuts" in the valuation of underlying assets. This implies that the value of the underlying asset is calculated as the market value of the asset less a certain percentage (haircut).

b) Variation margins (marking to market): The Eurosystem requires the haircut-adjusted market value of the underlying assets used in its liquidity-providing reverse transactions to be maintained over time. This implies that if the value, measured on a regular basis, of the underlying assets falls below a certain level, the Eurosystem will require the counterparty to supply additional assets or cash (i.e. it will make a margin call). Similarly, if the value of the underlying assets, following their revaluation, exceeds a certain level, the counterparty may retrieve the excess assets or cash. Checks for the need to implement variation margins are applied daily.

The Eurosystem applies specific risk control measures according to the types of underlying assets submitted by the counterparty. The risk control framework for credit claims includes the following elements (see also European Central Bank (2011b), sections 6.4.3.1 and 6.5.2).

The valuation haircuts applied to individual credit claims differ according to the residual maturity, the type of interest payment (fixed or variable), the credit quality category and the valuation methodology applied by the NCB. Credit claims are assigned a value corresponding either to the theoretical price or to the outstanding amount (higher haircuts may apply to a valuation based on the outstanding amount).

Haircuts applicable to non-marketable assets (credit claims)

Credit quality	Residual maturity (years)	Fixed interest payment and valuation based on a theoretical price assigned by the NCB	Fixed interest payment and valuation based on the outstanding amount assigned by the NCB
Steps 1 and 2 (AAA to A-)	Up to 1	8.0	10.0
	1 to 3	11.5	17.5
	3 to 5	15.0	24.0
	5 to 7	17.0	29.0
	7 to 10	18.5	34.5
	> 10	20.5	44.5
Step 3 (BBB+ to BBB-)	Up to 1	15.5	17.5
	1 to 3	28.0	34.0
	3 to 5	37.0	46.0
	5 to 7	39.0	51.0
	7 to 10	39.5	55.5
	> 10	40.5	64.5

3.2 ELIGIBILITY CRITERIA FOR CREDIT CLAIMS SET BY MAJOR CENTRAL BANKS

With regard to the legal and operational issues, the eligibility criteria for credit claims set by major central banks reflect the related challenges. While the Eurosystem and the Bank of Japan accept credit claims as eligible collateral for most of their monetary policy operations, other central banks have usually been accepting credit claims as collateral in a relatively limited way compared with marketable assets. For instance, the Federal Reserve and the Bank of England accept credit claims in a limited way for specific operations, such as discount window facilities, while these central banks do not generally accept credit claims for their open market operations.[13] However, for those types of operation in which the Federal Reserve and the Bank of England accept credit claims, they accept a wider range of loans, including even those ineligible as collateral for other central banks. For instance, while the Eurosystem and the Bank of Japan do not accept loans to individuals on a stand-alone basis,[14] the Federal Reserve and the Bank of England accept residential mortgages and consumer loans (see Table 1).

The different treatments of collateral for the open market operations and for the discount window facilities could be justified by the different objectives of these operations.[15] For the open market operations aimed at managing liquidity in the banking system in general, central banks expect their counterparties to manage their individual liquidity needs in the market. In that case, the central bank does not necessarily have to take into account the availability of collateral for particular counterparties. On the other hand, for the discount window type of operations, central banks might need to take into account the collateral needs (or their ability to submit collateral) of specific counterparties as the objective is to meet the liquidity needs of these specific counterparties. This distinction has, however, recently become less clear, especially after the Eurosystem and the Bank of England implemented the ACC framework and the Funding for Lending Scheme (FLS) respectively, under which a broader range of credit claims became temporarily eligible for open market operations (for the ACC framework) or non-discount window-type operations (for the FLS).

13 The Federal Reserve mainly conducts its monetary policy operation via outright transactions; thus the importance of collateralised lending is not significant from a monetary policy perspective.
14 The Eurosystem accepts ABSs, covered bonds and the Irish mortgage-backed promissory notes, which may include loans to individuals in their underlying assets. While loans to individuals are not eligible under the single list of collateral, loans to individuals are accepted in certain jurisdictions within the ACC framework implemented by the Eurosystem as a temporary measure in December 2011.
15 See Chailloux et al. (2008) and Cheun et al. (2009).

Table 1 Eligibility criteria for credit claims as central bank collateral

	Relevant operations	Eligible credit claims for collateral (eligible debtor/guarantor)
Eurosystem	Wide (eligible for open market operations)	Public sector, non-financial corporations, international/supranational institutions
Federal Reserve	Narrow (discount window)	Agricultural loans, commercial loans/leases, US agency-guaranteed loans, commercial real estate loans, construction real estate loans, raw land, family mortgage loans (first lien, second lien, home equity), private banking loans, unsecured consumer loans, consumer loans/leases (auto, boat loan, etc.), credit card consumer loans (prime, sub-prime), student loans
Bank of England	Narrow (discount window)	Residential mortgages, consumer loans (excluding credit cards), commercial real estate loans, corporate loans to non-banks
Bank of Japan	Wide (eligible for open market operations)	Loans to companies, real estate investment corporations, the government and municipal governments, as well as loans with government guarantees

Sources: Bank of England, Bank of Japan, ECB and Federal Reserve websites.

Table 2 Eligibility criteria for credit claims as central bank collateral concerning jurisdiction

	Eurosystem [1]	Federal Reserve	Bank of England	Bank of Japan
Place of borrower	Euro area	United States (in principle)	United Kingdom (in principle)	Japan
Currency denomination	EUR	USD, EUR, GBP, JPY, CHF	GBP, USD, EUR, AUD, CAD, SKR, CHF	JPY
Governing laws	Euro member states. The total number of laws shall not exceed two	United States	United Kingdom	Japan
Maturity	No cap	Up to 25 years	Up to 40 years	Up to 10 years

Sources: Bank of England, Bank of Japan, ECB and Federal Reserve websites.
1) For the detailed governing law requirements for credit claims in the Eurosystem, see European Central Bank (2011b), section 6.2.2.1, which states that: "The credit claim agreement and the agreement between the counterparty and the NCB mobilising the credit claim as collateral ("mobilisation agreement") must both be governed by the law of a Member State. Furthermore, the total number of different governing laws that are applicable to (i) the counterparty; (ii) the creditor; (iii) the debtor; (iv) the guarantor (if relevant); (v) the credit claim agreement; (vi) the mobilisation agreement may not exceed two."

The recent central bank measures concerning credit claims, such as the ACC framework and the FLS, are further discussed in Section 4.

Table 2 shows a subset of the eligibility criteria for credit claims set by major central banks.[16] As pointed out above, a more lenient treatment can be observed for credit claims accepted only for discount window-type operations. For instance, in addition to wider varieties of debtors or guarantors, some central banks accept a broad range of currency denominations for credit claims used for discount window collateral. Other requirements are, however, more or less similar or do not necessarily reflect the differences in the monetary policy implementation framework of each central bank. For example, the Eurosystem does not set requirements for the maturity of the credit claims to be submitted, while the Bank of Japan does not accept credit claims with a remaining maturity of more than ten years. The Federal Reserve and the Bank of England accept credit claims with maturities of up to 25 years and 40 years, respectively.

Other important requirements relate to "nationality" or jurisdiction. All four major central banks require, in principle, that the borrower is located in their jurisdiction and the governing law is that of the jurisdiction where the central bank conducts monetary policy operations. These requirements for nationality could be justified by the cost/benefit aspects of monetary policy implementation and the need to reduce legal/operational risks. The nationality requirement concerning the governing law is justifiable especially in situations where counterparties have most of their exposures to debtors located in the same countries or jurisdictions and most of the assets are governed by the laws of these same countries or jurisdictions.[17] Accepting credit claims whose debtors are located in other jurisdictions would generally bring additional legal or operational challenges as central banks normally lack legal and operational expertise on jurisdictions other than their own. However, because of the importance of the cross-border use of credit claims within the euro area, the Eurosystem addressed some of the challenges concerning nationality. For instance, the Eurosystem implemented a framework enabling counterparties to use credit claims governed by the laws of other euro area countries as Eurosystem collateral to receive credit from their respective NCB.

16 Table 2 does not contain the eligibility criteria for the ACC framework implemented by the Eurosystem in December 2011. For more information on the ACC framework, see Section 4.

17 The nationality requirements can also be seen in the context of the efforts to foster market activity in a particular market segment of eligible assets in each jurisdiction. European Central Bank (2006) notes that "by increasing the liquidity of an entire asset class, such as bank loans, on the balance sheets of banks, the single list of collateral fosters the smooth functioning of the euro area financial system. This may also indirectly foster analogous developments in private transactions".

The use of the correspondent central banking model (CCBM) for credit claims is addressed later in the paper.

3.3 OPERATIONAL ASPECTS OF THE USE OF CREDIT CLAIMS AS COLLATERAL

The relatively high operational costs of the use of credit claims as collateral can also be seen in the additional eligibility and operational requirements for credit claims that are not required for marketable assets (see Table 3). The requirements relate to: (i) ex ante notification of the debtor about mobilisation (in some jurisdictions); (ii) physical delivery of related loan documents; (iii) transferability of credit claims; and (iv) reporting requirement of counterparties regarding the existence of credit claims. These conditions which are directly required by national legislations (e.g. i and iii) or reflect central bank policies (e.g. iv) imply that credit claims are not normally assets which are expected to trade with high frequency.

Aiming to ensure the creation of a valid security interest over credit claims as well as the swift realisation in the event of counterparty default, the Eurosystem sets several requirements for the use of credit claims as collateral. There are six different requirements:[18] (i) verification of the existence of credit claims; (ii) validity of the agreement for the mobilisation of credit claims; (iii) full effect of the mobilisation vis-à-vis third parties; (iv) absence of restrictions related to banking secrecy and

18 See the Guideline of the European Central Bank of 26 November 2012 amending Guideline ECB/2011/14 on monetary policy instruments and procedures of the Eurosystem (ECB/2012/25) (page 16).

Table 3 Credit claim mobilisation requirements set by central banks

	Eurosystem	Federal Reserve	Bank of England	Bank of Japan
Debtor notification of mobilisation	Required in some jurisdictions	Not required	Required	Required
Physical delivery of loan documents	Required in some jurisdictions	Not required for pledges of credit claims through borrower-in-custody arrangements	Counterparty keeps documents/records on behalf of the BoE	Required
Transferability of credit claims	No legal restrictions on transferability required	No legal restrictions on transferability required	No legal restrictions on transferability required	No legal restrictions on transferability required
Periodic reporting by counterparty (e.g. existence of credit claims)	Required. Quarterly self-certification (as a minimum). Random checks by NCBs/supervisors (conducted at least annually)	Required	Required	Not required 1)
Minimum size threshold upon submission	€500,000 threshold for cross-border use via CCBM. For domestic use, each NCB applies a minimum threshold of its choice	Not required	Not required	JPY 500 million
Appointment of counterparty as administrator of collateralisation	Not required	Not required	Required	Not required

Sources: Bank of England, Bank of Japan, ECB and Federal Reserve websites.
1) The Bank of Japan requires counterparties to submit the documents that ensure debtors/obligors acknowledged the assignment of credit claims to the Bank of Japan without objection. The acknowledgement provides legal protection for the assignee or collateral taker against possible challenges by debtors/obligors regarding the extinction of claims.

confidentiality; (v) absence of restrictions on the mobilisation of the credit claim; and (vi) absence of restrictions on the realisation of the credit claim.

As regards the transferability of credit claims, all central banks require that no restrictions be imposed on the transferability of the credit claims, as indicated in Table 3. For instance, the Eurosystem requires that credit claims to be submitted as collateral be "fully transferable": "Counterparties shall ensure that credit claims are fully transferable and can be mobilised without restriction as collateral for the benefit of the Eurosystem. There should not be any restrictive provisions on mobilisation in the credit claim agreement or in other contractual arrangements between the counterparty and the debtor, unless national legislation provides that any such contractual restrictions are without prejudice to the Eurosystem with respect to the mobilisation of collateral."[19] The requirement of transferability is one of the conditions aiming to ensure the validity of the security interest over the submitted credit claims, as pointed out above.

With regard to the notification requirement, some euro area NCBs require their counterparties to notify ex ante the debtors about the submission of credit claims as collateral. One of the basic ideas of requiring collateral providers to notify debtors is to protect the collateral takers (e.g. central banks) from being exposed to potential disputes with other parties about the existence of priority over the submitted credit claims. By ensuring that the debtors have all possible relevant information on the mobilisation, the debtors could function in theory as an information source regarding the existence of credit claims. Before the revisions of the EU's Financial Collateral Directive in 2009, most of these notifications were conducted in writing[20] as the issues related to priorities are mostly resolved by the dates of the agreements on assignment/pledge, or the timing of the notification to the debtor, under European contract law.[21] The notification requirement has even been used as a validity requirement (not only as a priority requirement) for the creation or the assignment of credit claims in some jurisdictions.[22] The notification requirement has been perceived as one of the factors that discourages the usage of credit claims as collateral, as it might cause unintended speculation about the financial soundness of collateral providers.[23] Some NCBs also require counterparties to deliver the authentic loan contract or any other related documents to the collateral taker, which might increase the cost of handling credit claims. The "maintenance costs" of credit claims used as collateral are often regarded as the main factor increasing the operational costs. Unlike marketable assets that are traded in accepted markets, the verification of the existence of credit claims is indispensable for ensuring the validity of the collateral. The Eurosystem, for instance, requires counterparties to provide at least quarterly self-certification of the existence of credit claims submitted. Random checks (at least on an annual basis) by NCBs and supervisors are also conducted, aiming to ensure the credibility of the self-certifications.

While the above requirements are indispensable for collateral takers to secure their security interests over the credit claims, it is true that the requirements place additional costs on both collateral

19 See the Guideline of the European Central Bank of 26 November 2012 amending Guideline ECB/2011/14 on monetary policy instruments and procedures of the Eurosystem (ECB/2012/25) (page 16).
20 Kötz and Flessner (1997).
21 Flessner (2008).
22 See Walsh (2008) (page 324): "In some states, notification of (or consent by) the debtor on the assigned receivable is necessary to perfect the right both as against the debtor on the assigned receivable and as against competing claimants – such as another assignee or secured creditor or the grantor's or assignor's unsecured creditors or insolvency administrator." Walsh (2008) also points out that "the situation was changed, however, even before the Financial Collateral Directive was revised as some states amended their laws to make notification a pre-requisite to the effectiveness of an assignment or security right only as against the debtor on the assigned receivables."
23 See Walsh (2008) (page 324): "…direct notification and collection may adversely affect the assignor's customer relations or reputation. Consequently, notification as a priority mechanism is at odds with commercial practices and is apt to produce rather arbitrary outcomes especially in the context of bulk assignments".

providers and collateral takers using credit claims instead of marketable assets. Because of the challenges inherent in the use of credit claims as collateral, central banks generally implement some requirements in their eligibility criteria aiming to reduce the related cost of the collateralisation. These include the minimum size requirement or the threshold for credit claims which could be regarded as a device to strike a balance between the costs and benefits for collateral takers and providers. For instance, the Eurosystem applies a common minimum threshold of €500,000 for cross-border use of credit claims via the CCBM. For the use of credit claims according to domestic procedures, each NCB may apply a minimum size threshold of its choice, as the costs of mobilisation differ significantly depending on legal requirements and the operational set-up. The Bank of Japan uses a minimum threshold of JPY 500 million. The Federal Reserve and the Bank of England do not set a minimum size threshold as they basically accept credit claims only for emergency purposes. It is also worth noting that the Bank of England requires the counterparties to function as an agent for the Bank of England to handle administrative procedures, such as the notification of debtors and the keeping of records or related legal documents.[24] Legislators are also considering ways to reduce the costs of using credit claims as collateral. The related issues are addressed later in this paper.

3.4 EUROSYSTEM PRACTICES CONCERNING THE USE OF CREDIT CLAIMS AS COLLATERAL

The Eurosystem and its counterparties face additional difficulties concerning the use of credit claims as collateral since the legal requirements for mobilisation and the related operational infrastructures vary in each jurisdiction (see Table 4).

24 The Bank of England appoints the counterparty who submits a portfolio of loans as collateral in the discount window facility (DWF) as the sole and exclusive administrator who is required to perform certain services on behalf of the Bank of England. These services include: (i) keeping records/books of account/documents related to DWF transactions; (ii) keeping records for all taxation purposes including VAT; (iii) notifying relevant borrowers of any changes in payments under the DWF loans; (iv) providing a redemption statement to a borrower; (v) notifying relevant borrowers of any other matter or thing which the applicable DWF loan condition or offer conditions require them to be notified of in the manner and at the time required by the relevant DWF loan conditions; and (vi) keeping a loan account for each DWF loan which shall record all proceeds received in respect of that DWF loan and all amounts debited to such loan account. See Bank of England (2011) for a more detailed explanation on loan collateral.

Table 4 Eurosystem credit claim mobilisation procedures

	Collateralisation legal technique	Ex ante notification of debtor	Communication interface
AT	Pledge/assignment	No	Proprietary interface
BE	Pledge	No	S.W.I.F.T.
CY	Assignment	No	Fax/paper-based
DE	Assignment	No	Proprietary interface
EE	Pledge	No	S.W.I.F.T./electronic file
ES	Pledge	No	Paper-based
FI	Pledge	No (negotiable promissory notes)	Fax/electronic file
FR	Pledge	No	Proprietary interface
GR	Pledge	Yes	Paper-based
IE	Floating charge	No	Electronic file
IT	Pledge	Yes (temporary waiver until June 2013)[1)]	Proprietary interface/S.W.I.F.T.
LU	Pledge	No	S.W.I.F.T.
MT	Pledge	Yes	Fax/electronic file
NL	Assignment	No	S.W.I.F.T.
PT	Pledge	No	Proprietary interface
SI	Pledge/assignment	Yes	S.W.I.F.T.
SK	Assignment	No	S.W.I.F.T.

Source: Eurosystem.
1) The ex ante notification of the debtor of a credit claim before mobilisation is not currently required by the Banca d’Italia due to the temporary waiver by the related legislation (the notification requirement is expected to be implemented from June 2013).

The differences in legal techniques of collateralisation such as pledge, assignment or floating charge require that different legal procedures be followed.[25] Differences in handling procedures for mobilising credit claims adopted by NCBs might make the use of credit claims as collateral rather challenging in the context of their cross-border use. Against this background, the Eurosystem has been implementing several measures aimed at reducing the cost associated with the use of credit claims as collateral for counterparties including the above-mentioned cross-border use of credit claims. As regards the cross-border use of collateral, the Eurosystem already implemented the CCBM, which enables counterparties to obtain credit from their home central banks (HCBs) by mobilising cross-border collateral. This includes credit claims that are governed by the law of another euro area country.[26] Under the CCBM, the NCB of the jurisdiction that governs the submitted credit claims (correspondent central bank or CCB) accepts collateral on behalf of the HCB. Under the "agency model", the HCB decides on the related legal technique (e.g. assignment/pledge) from among the options offered by the CCB.

NCBs have also implemented some measures which contribute to reducing the cost for counterparties of using credit claims as collateral. For instance, the relatively automated communication interfaces for credit claims implemented by some NCBs enable counterparties to post credit claims as Eurosystem collateral in an efficient manner. The two NCBs which implemented highly automated communication interfaces for credit claims are the Deutsche Bundesbank and the Banque de France, both having counterparties with a large outstanding amount of credit claims in the euro area. The Deutsche Bundesbank introduced in 2007 the proprietary communication interface "KEV" (Kreditforderungen - Einreichung und Verwaltung), which enables counterparties to submit all relevant information on credit claims via the internet on a single-loan basis or via file transfer on a multiple-loan basis. Once KEV receives the data on credit claims, it checks the eligibility by means of a semi-automated procedure. KEV is connected to the Deutsche Bundesbank's ICAS where the credit ratings of debtors are automatically checked. The whole process of mobilisation can be completed within a few minutes, if all eligibility criteria are met and no relevant information is missing. The mobilisation procedures for credit claims are also highly automated at the Banque de France. The Banque de France has been operating a proprietary interface for credit claims called "TRICP" (TRaitement Informatisé des Créances Privées) since 1998. Once counterparties send the relevant information, the system automatically checks the eligibility of the submitted credit claims including the debtor credit ratings stored in the relevant system. The collateralisation process is completed once the Banque de France receives the deed of transfer of financial claims signed by counterparties. In both jurisdictions, the costs of the use of credit claims are rather marginal due to the proprietary interfaces for credit claims and the relatively large coverage of ICAS ratings for the debtors in each jurisdiction.

These relatively automated communication interfaces are normally implemented by NCBs with a large number of counterparties and a bigger potential amount of credit claims in the domestic market. However, when considering the implementation of an automated IT infrastructure for the use of credit claims as collateral, several factors need to be taken into account. These factors include the number of counterparties, the potential availability of credit claims in the domestic market, the financing structure of NFCs, national legislative requirements concerning mobilisation[27] and the availability of credit ratings for the debtors in the domestic market.

25 Sauerzopf (2007) points out the legal cost of cross-border collateralisation: "A particular disadvantage for the euro area-wide use of credit claims as collateral is that there is no harmonised Community law of obligations and no Community civil law. For example, the cost of collateralisation (e.g. assignment for security purposes or pledge) might rise if for every assignment or pledge a legal opinion on the collateralisation procedure or on possible conflict of law situations has to be drawn up."

26 For the details of the correspondent central banking model, see European Central Bank (2011a).

27 For instance, in some jurisdictions national legislations require physical delivery of the loan contract or other related documents as a precondition for the legal transfer of the collateral.

4 CENTRAL BANK MEASURES RELATING TO CREDIT CLAIMS

Central banks have been taking several measures aimed at facilitating corporate financing in each of their jurisdictions in response to deteriorating financial conditions, especially after the bankruptcy of Lehman Brothers in late 2008.[28] Under these policy measures, central banks purchased several types of private debt such as ABSs, covered bonds, corporate bonds or commercial paper. However, central banks did not conduct outright purchases of credit claims on a stand-alone basis as part of their monetary policy implementation. This could have been for cost/benefit reasons. On top of the general legal and operational challenges as well as difficulties in valuation, credit claims are normally tailored to borrowers' needs with considerable variation (e.g. maturities, size of loans, coupon types). Taking into consideration the limited liquidity of most credit claims, these aspects would unavoidably require large costs should central banks need to realise these assets. With regard to measures using credit claims, central banks have been taking two approaches: (i) incentivising the counterparties to pledge credit claims as collateral; or (ii) incentivising the counterparties to create credit claims. With regard to (i), the Bank of Japan took an approach providing favourable terms and conditions for liquidity provision against private debt collateral including credit claims. In 2009 and 2010 the Bank of Japan implemented, as a temporary measure, a facility which provided liquidity with fixed rate and full allotment only against corporate debt as collateral including credit claims.[29] The structure provided strong incentives for counterparties to use corporate debt as collateral. The outstanding amount of the credit claims submitted to the Bank of Japan increased sharply after the implementation of the facility, although the share of the credit claims in total collateral accepted by the Bank of Japan remained rather limited.[30]

Taking into account the importance of credit claims in the euro area as pointed out above, the Eurosystem took measures focusing on credit claims which expanded their eligibility as collateral. The ECB implemented the ACC framework as part of the temporary measures aiming to support bank lending and money market activity in December 2011.[31] Under the ACC framework, NCBs are allowed temporarily to accept additional credit claims based on the specific eligibility criteria and risk control measures set by NCBs. This means that NCBs can choose to implement an ACC framework and can then accept certain credit claims that are not eligible in the single list of Eurosystem collateral, provided that the eligibility criteria and the risk control framework are both approved by the Governing Council of the ECB. One of the major reasons for implementing the ACC framework was to mobilise unencumbered performing credit claims, while utilising the expertise of NCBs, taking into account that credit claims reflect local features. The results of the proposals made by NCBs under the ACC framework, however, could also be regarded as another piece of evidence of challenges in the use of credit claims as collateral in the euro area. Table 5 shows the deviations from the eligibility requirements stipulated in the General Documentation of the Eurosystem. Apart from relaxing the credit threshold as determined by the minimum accepted probability of default[32] or extending currency denominations, four NCBs proposed to use new types

28 For instance, the US Federal Reserve introduced the AMLF (Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility), the CPFF (Commercial Paper Funding Facility) and the TALF (Term Asset-Backed Securities Loan Facility) in late 2008. The Bank of Japan implemented its ABS and ABCP outright purchase programme back in 2003 and introduced the commercial paper and corporate bond outright purchase programmes in December 2008 and January 2009 respectively. The Bank of England also implemented its commercial paper/corporate bond and ABCP purchase programmes in 2009.

29 The Bank of Japan conducted the operation "Special Funds-Supplying Operations to Facilitate Corporate Financing" during 2009 and 2010 (the last offer was in March 2010).

30 Bank of Japan (2012).

31 Other measures were: (i) the conduct of two longer-term refinancing operations with a maturity of 36 months; (ii) the discontinuation of the fine-tuning operations carried out on the last day of each maintenance period; and (iii) the reduction of the minimum reserve ratio to 1%.

32 According to the General Documentation (section 6.3.1), the Eurosystem considers a probability of default (PD) of 0.40% over a 1-year horizon as its minimum requirement for high credit standards (credit quality threshold) which is defined in terms of a credit assessment of credit quality step 3 in the Eurosystem's harmonised rating scale. A credit quality step 3 credit assessment means a minimum long-term rating of BBB by Fitch or Standard & Poor's, of Baa3 by Moody's, or of BBB by DBRS.

Table 5 NCBs' additional credit claims (deviations from the Eurosystem's General Documentation)

	Types of loan/debtor/guarantor	PD	Currency
General Documentation	Non-financial corporations and public sector entities located in the euro area, international or supranational institutions	0.4%	EUR
AT		1%	
CY	Additional credit claims for which Central Bank of Cyprus counterparties can claim full repayment in case of default, other than leasing contracts, syndicated loans and credit claims backed by real estate assets. *Individuals*, municipalities and other local authorities are eligible debtors. *The debtor and the guarantor can be established in the EEA* in cases where the Central Bank of Cyprus is the home supervisor for the counterparty.	1.5%	USD, GBP, CHF, JPY
ES	Performing corporate and public sector entity credit claims, other than mortgages, which are denominated in euro or in *major foreign currencies* and whose estimated credit risk has a PD equal to or lower than *1%*.	1%	Major foreign currencies
FR	Credit claims denominated in *USD*. Export credit *guaranteed by a credit insurance company* (Coface); *real estate residential loans* which benefit from a mortgage or firstrank privilege, or a *guarantee from a credit institution or an insurance company*.	1%	USD
IE	*Pools of credit claims*, in the form of Irish residential mortgage loans, and secured and unsecured loans to non-financial corporates (on a phased basis, residential mortgages *governed by UK law*, or secured by UK assets, subject to UK lawyers in the UK would be included).	1.5%	GBP
IT	Loans *guaranteed by an insurance company* (SACE, an insurance company wholly owned by the Italian Ministry of Economy and Finance).	1%	
PT	*Portfolio of credit claims* relating to: (i) *mortgage-backed loans to households*; (ii) *consumer credit to households*; and (iii) loans to enterprises other than financial corporations.	1.5%	

Notes: Table 5 shows the deviations (in Italics) in types of loan/debtor/guarantor of ACC requirements from the requirements set by the General Documentation. Table 5 is based on the information available on the NCB websites in February 2012. Interested readers should consult the websites of the ECB or the relevant NCBs for updated information. For information on additional credit claims accepted by each NCB (in February 2012, available in English):
AT (Oesterreichische Nationalbank): http://www.oenb.at/en/presse_pub/aussendungen/2012/2012q1/pa_20120209_oenb__ecb_governing_council_endorses_expansion_of_eligibility_criteria_for_nonmarketable_assets_245288_page.jsp#tcm:16-245345.
CY (Central Bank of Cyprus): http://www.centralbank.gov.cy/nqcontent.cfm?a_id=11604.
ES (Banco de España): http://www.bde.es/f/webbde/GAP/Secciones/SalaPrensa/NotasInformativas/12/Arc/Fic/presbe2012_4e.pdf.
FR (Banque de France): http://www.banque-france.fr/uploads/tx_bdfgrandesdates/2012-02-9-eligibility.pdf.
IE (Central Bank of Ireland): http://www.centralbank.ie/mpolbo/mpo/eassets/Documents/Information%20note%20-eligibility%20for%20additional%20credit%20claims.pdf.
PT (Banco de Portugal): http://www.bportugal.pt/en-US/OBancoeEurosistema/ComunicadoseNotasdeInformacao/Pages/combp20120209.aspx.

of credit claim that were not accepted by the Eurosystem in February 2012 when the Governing Council of the ECB first approved NCB proposals. The new types of credit claim are: (i) real estate residential loans (loans to individuals); and (ii) pools of loans (backed by individual claims or mortgages).

Other types of measures concerning credit claims which would fall under (ii) above (on incentivising counterparties to create credit claims) have also been taken recently. For instance, the Bank of Japan and the Bank of England are more directly incentivising counterparties to provide lending to the real economy by providing a facility with favourable terms for certain eligible counterparties. In 2010 the Bank of Japan implemented a lending facility under which it would provide loans at the same rate as its target rate (i.e. uncollateralised overnight call rate) for one year with a rollover option of up to three times (i.e. up to four years in total) for counterparties that have a record of lending or investment to a specific area.[33] The lending facility was integrated into the new lending facility announced by the Bank of Japan on 30 October 2012. Under the new lending facility, the

33 See Bank of Japan (2010) for an overview of the operation. In order for counterparties to utilise the operation, the funds lent or invested should be used for one of the areas specified by the Bank of Japan. The operation has been expanded to encompass three measures concerning: (i) asset-based lending; (ii) small-lot investments and loans; and (iii) the US dollar lending arrangement (as of October 2012).

Bank of Japan would provide lending on favourable terms to counterparties which increased their net lending to the non-financial private sector during the observation period.[34] The Bank of England initiated the Funding for Lending Scheme (FLS) in July 2012.[35] Under the scheme, it would lend UK Treasury bills for up to four years to counterparties (banks and building societies) by taking collateral that is eligible for the discount window facility (DWF) including several types of credit claim. Under the FLS, counterparties can borrow up to an amount equivalent to the sum of 5% of their existing outstanding lending to UK non-financial private sectors as at end-June and the net increase in lending during a reference period. The counterparties would be able to use the Treasury bills gained through the collateral swap for the purpose of collateral in private repo transactions, for instance, thereby reducing the cost of funding. These central banks implemented such measures in the hope that they would act as a catalyst for lending by financial institutions to the real economy in the two juridictions.

34 See the Bank of Japan announcement of 30 October 2012 ("Enhancement of Monetary Easing" and its attachment 2 "Framework for the Fund-Provisioning Measure to Stimulate Bank Lending"). Under the new lending programme, the Bank of Japan would fulfil any request for funds from each counterparty up to an amount equivalent to the net increase in lending to NFCs from the designated date. The interest rate is equivalent to the target rate (i.e. at that time 0.1%) and the loans have durations of one year, two years and three years. Rollover would also be available for up to four years.

35 See Bank of England (2012) for an overview of the Funding for Lending Scheme.

5 PUBLIC AND PRIVATE INITIATIVES ON THE USE OF CREDIT CLAIMS

Given the importance of credit claims in the real economy as well as the challenges in using them as collateral, several initiatives aimed at facilitating the use of credit claims have been taken both by the public and the private sector. With regard to the public sector initiatives, the revision in 2009 of the EU's Financial Collateral Directive and its subsequent implementation in legislation in member countries has dealt with several issues relating to the use of credit claims as collateral from the legal perspective. As regards the private initiatives, the documentation standardisation led by the Loan Market Association is one of the major factors contributing to the development of syndicated loan transactions in Europe. The international central securities depositories (ICSDs) are also trying to expand their businesses relating to syndicated loans and other credit claims. Furthermore, the recent initiatives taken by the European Repo Council include steps to foster the usage of credit claims in the secondary market.

5.1 PUBLIC INITIATIVES: THE EU FINANCIAL COLLATERAL DIRECTIVE

The EU's Financial Collateral Directive was revised in 2009[36] with the objective of facilitating the use of credit claims as collateral "both in the domestic and the cross-border setting", as European Commission (2008) points out. The implementation of the Financial Collateral Directive by the Member States was completed in 2012. The Commission took two approaches towards facilitating credit claim collateralisation in the euro area. The first approach was to extend the coverage ("material scope") of the Financial Collateral Directive from cash and securities to credit claims[37] so as to provide the same legal protections for these assets especially in case of a counterparty default. For instance, the Financial Collateral Directive stipulates provisions relating to the validity of close-out netting (Article 7) and disqualification of certain insolvency provisions (Article 8). These ensure the validity of the security interest of collateral takers in case of the insolvency of the counterparty. The second approach aims to remove the obstacles that might discourage the use of credit claims as collateral. This includes abolishing "formal requirements" concerning the use of credit claims as collateral such as the ex ante registration or the notification to the debtor of the mobilisation (Article 3).[38] As discussed earlier, the requirement of ex ante notification to debtors of mobilisation might cause unintended speculation about the financial soundness of the creditor. This might make creditors hesitant to use the underlying credit claim as collateral.[39] The possibility of the exercise of set-off rights vis-à-vis creditors by the debtor and the risk of breach of banking secrecy in case the creditor discloses information on the debtor were also recognised as potential obstacles for the use of credit claims as collateral. Against this background, the revised Financial Collateral Directive also included provisions without prejudice to consumer rights enabling debtors to waive rights of set-offs and rights arising from banking secrecy rules in member countries (Article 3 (b)).

36 Directive 2009/44/EC of the European Parliament and of the Council of 6 May 2009 amending Directive 98/26/EC on settlement finality in payment and securities settlement systems and Directive 2002/47/EC on financial collateral arrangements as regards linked systems and credit claims.

37 Member States may exclude the application of the Financial Collateral Directive to credit claims where the debtor is a consumer or certain small enterprises. The opt-out does not apply, however, if the collateral takers are a central bank, the European Central Bank or certain other supranational institutions.

38 However, the Financial Collateral Directive (Article 3) also stipulates that: "Member States may require the performance of a formal act, such as registration or notification, for purposes of perfection, priority, enforceability in evidence against the debtor or third parties." The paragraph on "formal requirements" will be reviewed by the European Commission, and the Commission will report by 30 June 2014 to the European Parliament and to the Council on whether the paragraph continues to be appropriate.

39 European Commission (2008) points out that the collateral use in Germany increased after the requirement of the ex ante notification was abolished. Germany was one of the countries which did not require ex ante notification to the debtor or registration of mobilisation before the Financial Collateral Directive was revised in 2009.

These revisions have improved the conditions of credit claim use as collateral in some countries[40] and in a cross-border context by harmonising some of the provisions concerning the validity of credit claim use.[41, 42]

5.2 PRIVATE INITIATIVES FACILITATING THE USE OF CREDIT CLAIMS

Some measures aiming to facilitate the usage of credit claims have been taken by the private sector. One is the standardisation of related documentation for syndicated loans, and the other relates to activities of ICSDs as well as of the European Repo Council.

5.2.1 DOCUMENTATION STANDARDISATION

The standardisation of the documentation for syndicated loans is undoubtedly one of the major initiatives that have contributed to facilitating the syndication of and secondary market transactions in syndicated loans. With regard to the syndicated loan transactions in Europe, the documents prepared by the Loan Market Association[43] have been widely used by market participants. While the LMA documents have a rather narrow scope, assuming English law to be the governing law and that debtors are located in the United Kingdom, for instance, it is perceived that most syndicated loans in Europe are structured based on the LMA documents by adapting them to the local law.[44] The benefit of having standardised documents for syndicated loans is to reduce the transaction or negotiating costs.[45] By having the LMA documents as a starting point for negotiations, lawyers or interested parties can focus more on essential commercial sections of the contract such as the conditions of lending or the treatment of financial covenants. The recommended form of the investment-grade facility was first published in 1999, with the involvement of the British Bankers' Association (BBA) and the Association of Corporate Treasurers (ACT), as well as several leading law firms in the United Kingdom. Since then, the LMA documents have been revised in response to market developments.

Important developments in the documentation include the incorporation of "Market Turmoil Provisions" into the related LMA documents after the Lehman Brothers insolvency in September 2008. For instance, taking into account the important roles played by the agent in a syndicated loan transaction (see Section 6.2.1), several provisions were included aiming to deal

40 According to European Commission (2008), the ex ante notification to the debtor was required for the creation, validity or admissibility of collateralisation in Finland, Greece, Ireland, Italy, Luxembourg and the Netherlands. The ex ante notification or registration was not required in France, Germany and Portugal.

41 The quantitative assessment of the impact of the revised Financial Collateral Directive (and its implementation in the national legislations) on credit claim usage or collateralisation is challenging, as factors relating to both the demand side (e.g. general economic situation) and the supply side (e.g. deleveraging by banks) would affect the development of credit claims. One potential proxy for observing the impact on the cross-border lending (which was one of the major objectives in revising the Directive) could be the development of MFI loans in Luxembourg as the financial institutions operating in that country are usually more active in cross-border lending than those in other jurisdictions. MFI loans in Luxembourg have, however, been declining continuously since 2009.

42 Facing similar challenges in the usage of credit claims, a new legal scheme was implemented in December 2008 in Japan aiming to facilitate their usage. A new type of monetary claim has been created under the law ("Electronically Recorded Monetary Claims Act"), the legal relationships of which are solely determined by the electronic records that are maintained by the "electronic monetary claim recording institutions" designated by the competent authorities. For an overview of these legal developments, see for instance the website of the Financial Services Agency in Japan at www.fsa.go.jp/ordinary/densi02-en.pdf.

43 The Loan Market Association (LMA) is the trade body for the syndicated loan market in the EMEA (Europe, Middle East and Africa) region which was established in 1996 by a group of banks. The membership currently consists of about 490 organisations comprising commercial and investment banks, institutional investors, law firms, service providers and rating agencies (as of October 2012). The LMA provides several documents relating to syndicated loans and best market practices.

44 Gupta (2011) points out that: "English law LMA documents represent the vast majority (by value and volume) of cross-border, syndicated loan transactions across Europe. The documentary standards have achieved such broad and deep penetration that many local-law transactions are now done on adapted LMA forms."

45 Read (2012) notes the advantage of the usage of the LMA agreement of: "avoiding lawyers having to spend time negotiating the finer details of clauses relating to areas such as notices, mandatory costs, and governing law for example. This leaves the borrower with the time to focus on the business/commercial aspects of the agreement, which will need to be negotiated for each and every deal."

with the situation where the agent could not perform its role properly.[46] The provisions include: (i) a clause enabling majority creditors to replace the malfunctioned agent without the notice signed by the agent; and (ii) a clause granting debtors the right to make payments directly to creditors. The provision concerning a "defaulting lender" has also been implemented in response to the deteriorated market conditions in 2009. Under this provision, the debtor would be allowed to replace the lender where an "Insolvency Event" is recognised.[47] As the importance assigned to these revisions to documentation implies, promoting standardised documentation is helpful in ensuring the security of the transactions, thereby facilitating the conduct of such transactions. The LMA documents are "non-binding" in nature[48] meaning that each contract should contain some provisions not stipulated in the LMA documents. Some provisions are drafted broadly or restrictively in the LMA documents, letting market participants decide the concrete terms.[49] For example, provisions concerning representation or event of default may be added or elaborated upon through negotiation processes.[50]

5.2.2 INITIATIVES OF INTERNATIONAL CENTRAL SECURITIES DEPOSITORIES

ICSDs have been seeking to develop and facilitate the usage of credit claims as collateral for interbank transactions in Europe. One initiative is to provide an identification number for each credit claim and to ensure that ICSDs record relevant information that is required for secondary market transactions.[51] While there is no unified rule which identifies loans in Europe similar to the ISIN number[52] for securities, some see the market-wide initiatives for the identification of loans as a precondition for expanding secondary market transactions in credit claims.[53] Euroclear currently provides a post-trade platform for syndicated loan transactions that includes providing unique loan identifiers for syndicated loans recorded in its platform and reconciliation services.[54] Further efforts to enhance the post-trade services relating to European credit claim transactions provided by ICSDs are also being observed. For instance, Euroclear signed in December 2011 a memorandum of understanding with Markit, a financial information services company, to jointly develop an infrastructure for facilitating the usage of credit claims.[55] Euroclear plans to provide the valuation of credit claims recorded on its platform. It also envisages accepting credit claims for its tri-party collateral management services.[56] Clearstream also announced in September 2011 a joint venture with DTCC (The Depository Trust & Clearing Corporation) aiming to provide and enhance the post-trade services for bilateral loans and syndicated loans for clients in Europe.[57] Clearstream envisages extending its tri-party services for credit claims as well.[58]

46 See Wherity (2011) for an overview of recent developments in LMA documentation.
47 The definition of "Insolvency Event" is critical for lenders as it might increase the commitments to the debtor by assuming those of the defaulting lender. Slaughter and May (2010) point out that lenders might have incentives to narrow the scope of the definition.
48 The LMA makes clear the non-binding nature of the documentation in its standardised documentations. "For the avoidance of doubt, this document is in a non-binding, recommended form. Its intention is to be used as a starting point for negotiation only. Individual parties are free to depart from its terms and should always satisfy themselves of the regulatory implications of its use." (The LMA "Multicurrency Term and Revolving Facilities Agreement")
49 Slaughter and May (2010) point out that several provisions stipulated in the Investment Grade Agreement might be regarded as unattractive from a debtor's perspective.
50 Wherity (2011).
51 Euroclear (2008) points out the challenges of loan markets, which include: (i) the lack of standardisation (e.g. lack of unique identification of loans); (ii) limited transparency (e.g. difficulties in communication between loan market participants); (iii) the low degree of efficiency and straight-through processing (e.g. paper-based post-trade processing).
52 International Securities Identification Number (ISIN) (www.isin.org).
53 For instance, De Vidts (2009).
54 Reconciliation is conducted to check whether the data recorded at the central securities depositories reflect the actual loans owned by their customers.
55 See the Euroclear and Markit press release of 19 December 2011 entitled "Markit and Euroclear Bank to create an end-to-end post-trade platform for syndicated loans".
56 See the Euroclear press release entitled "Leverage the potential of your loans as collateral" (available at www.euroclear.com).
57 See the Clearstream and DTCC press release of 15 September 2011 entitled "DTCC and Clearstream enter strategic partnership for loans and collateral management services".
58 See the Clearstream press release entitled "Banks lose EUR 4 billion a year through collateral management inefficiency" (available at www.clearstream.com).

Market-wide approaches aiming to encourage the use of credit claims have also been sought. The European Repo Council[59] set up a working group to examine the feasibility of creating a secondary market for credit claims. The working group discussed using credit claims, including syndicated loans, as repo collateral under the Global Master Repurchase Agreement (GMRA).[60] Under the Loan Repo scheme, it is envisaged that transfers of loans would be effected by the entry of matching orders in the clearing system, which would also produce a notice of assignment if necessary.[61] In order to create the scheme, the interested parties would be required to agree to rules which stipulate "standard procedures for a centralised electronic register of lenders' title to loans and allowing lenders to transfer and settle trades in the loans registered with the clearing system".[62] One might argue that the Loan Repo is trying to simplify the usage of credit claims by creating a quasi electronic trading infrastructure by private contractual arrangements.[63] This approach must be a pragmatic one, taking into account the still dispersed nature of the financial legal system in Europe. The fact that the project is currently being examined only for a limited number of EU jurisdictions (e.g. England, France and Germany) reflects the fact that the contractual approach would inevitably involve legal challenges and difficulties in its implementation.[64]

59 The European Repo Council (ERC) was established by the International Capital Market Association (ICMA) in 1999 as a forum for discussing developments in the European repo market. The ICMA is the self-regulatory organisation and trade association for the international securities market, the members of which are based in the European financial markets.

60 The Global Master Repurchase Agreement (GMRA) is a widely used standard master agreement for repo transactions in the cross-border market.

61 European Repo Council (2010).

62 European Repo Council (2010).

63 European Repo Council (2010) notes that it seeks to "adapt the terms of loans to permit same day settlement of loan transfers without borrower consent (to banks/central banks participating in the interbank repo market)".

64 The European Repo Council conducted a feasibility study on establishing loan repo systems in England, France and Germany. European Repo Council (2010) notes that: "The findings indicate that developing a credit claims annex under English and German law is feasible, but there is a potential obstacle for transferring loans in France due to formalities in relation to the transfer of loans."

6 SYNDICATED LOAN MARKET IN THE EURO AREA

The use of credit claims as collateral entails several challenges as discussed above. To recall, these challenges relate to valuation/credit assessment issues (limited availability of ratings, limited liquidity) and to legal and operational challenges (lack of standardisation (also regarding underlying collateral), restrictions on transferability, existence of credit claims, and set-off risk). Some of the above issues, however, seem to be less severe in the case of syndicated loans. For instance, syndicated loans have been used in secondary market transactions globally as well as in the euro area. The existence of the secondary market might suggest the broader availability of valuations compared with other credit claims. As was described above, there have also been several private initiatives aiming to encourage the usage of syndicated loans, such as documentation standardisation and the recent initiatives taken by the ICSDs and the European Repo Council. The primary market for syndicated loans in the euro area is rather sizeable. The tendency for syndicated loans to have a larger nominal amount relative to other credit claims would also suggest that a cost/benefit analysis of their potential use to collateralise lending would be more favourable in this case.

However, eligible syndicated loans are not necessarily actively used as Eurosystem collateral as suggested by some counterparties. The possible modest use of syndicated loans could be partly related to the differences in the structure of the loans compared with other types of credit claim which might make the loans not easy to assess using the eligibility requirements for credit claims set by the Eurosystem. For instance, the traditional format of syndicated loans would prevent compliance with the requirements that there be: (a) an absence of restrictions relating to banking secrecy and confidentiality; (b) an absence of restrictions on the mobilisation of the credit claims; and (c) an absence of restrictions on the realisation of the credit claims. Other possible reasons for the modest use of syndicated loans could include the eligibility requirements for the governing law. According to the General Documentation of the Eurosystem, the governing laws of credit claims must be those of the euro member countries and the total number of governing laws that are applicable to: (i) the counterparty; (ii) the creditor; (iii) the debtor; (iv) the guarantor; (v) the credit claim agreement; and (vi) the mobilisation agreement, may not exceed two.[65] One could argue that the governing law requirements would significantly reduce the amount of eligible syndicated loans which could be used for funding in the euro area, given that most of the loans are governed by UK law or by the law of other non-euro area jurisdictions. However, changes to the governing law requirement would generally require careful consideration from a cost/benefit perspective.[66] The governing law requirements are present also in other major central banks, especially for non-temporary measures as pointed out above. Detailed data on the distribution of the governing laws of the syndicated loans traded in the euro area are not easily available. Hence issues regarding the governing law are not addressed in this paper.

6.1 EUROPEAN SYNDICATED LOAN MARKET: AN OVERVIEW

A syndicated loan is a loan provided to a debtor by a group of lenders in a lending syndicate. As Altunbas et al. (2009) note, syndicated loans are normally used as alternatives to corporate bond financing and are likely to be used for large debt financing. Once the syndicated loan is signed, the typical syndicated loan scheme involves the agent bank, multiple lenders and the borrower (see Chart 6). Depending on the structure of the syndicated loan, a security trustee performs the function of the agent and a special-purpose vehicle (SPV) is also often used as a vehicle acting

65 European Central Bank (2011b), section 6.2.2.1.

66 The Eurosystem temporarily accepted syndicated loans governed by the laws of England and Wales in November 2008. The acceptance was later terminated having further assessed the costs and benefits associated with accepting the loans. See the ECB press release of 26 November 2008 entitled "Changes to the temporary expansion of the eligibility of collateral".

Chart 6 Basic structure of a syndicated loan

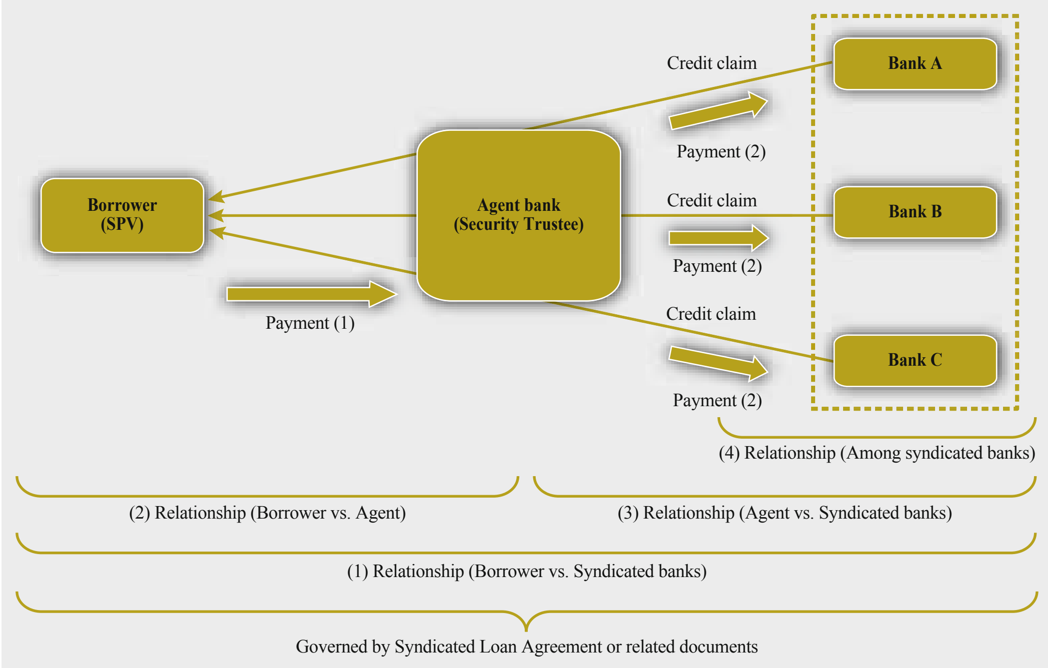
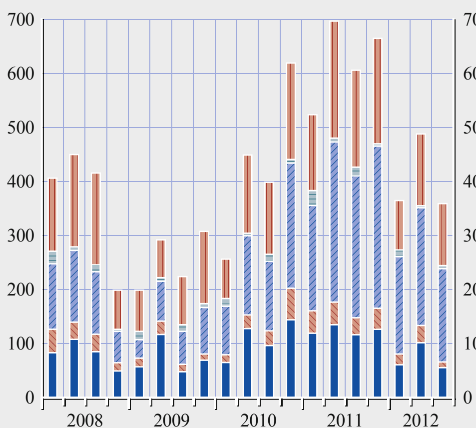


Chart 7 Signed international syndicated credit facilities by nationality of borrower

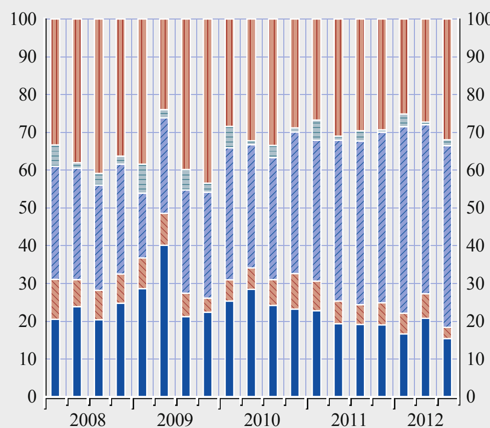
(signed amount, USD billion; in percent)

rest
Japan
US
UK
euro area

a) Signed syndicated loans



b) Share of signed syndicated loans



Source: BIS Quarterly Review (December 2012).

on behalf of the debtor (in this case the debtor guarantees the SPV). Hence, the syndicated loan agreement or the related legal documents need to cover at least four dimensions of legal relationships between: (i) the borrower and the syndicated banks; (ii) the borrower and the agent; (iii) the agent and the syndicated banks; and (iv) multiple lenders.

The primary market for syndicated loans in the euro area is sizeable. According to BIS data, around 20% of syndicated loans signed globally during the last three years were directed at debtors located in the euro area (see Chart 7). The corporate sector has traditionally been the largest borrower of syndicated loans in western Europe.[67]

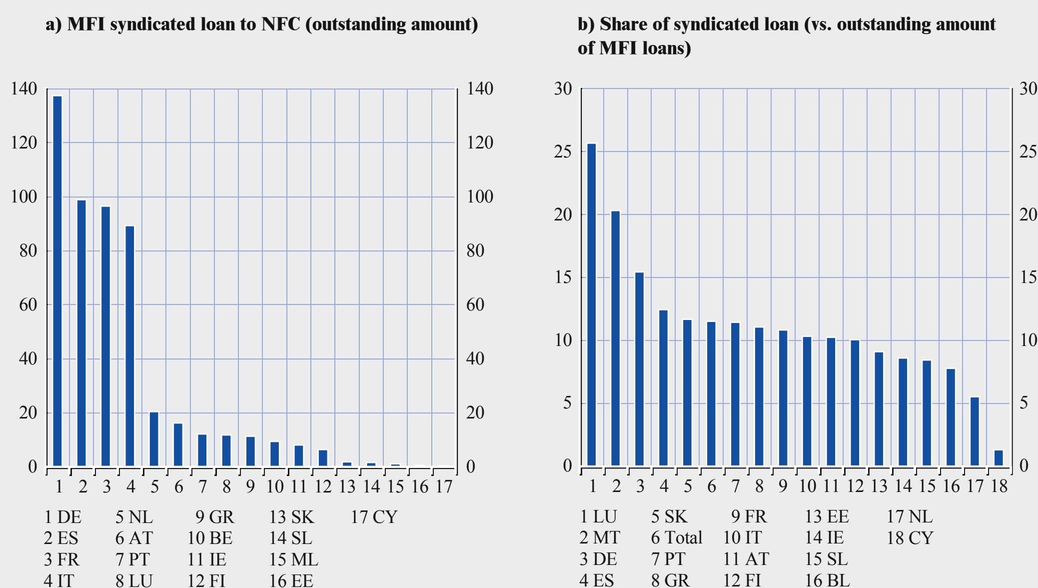
The data from the supply side also indicate that the syndicated loan market in the euro area is rather large. MFIs in the euro area had an outstanding amount of syndicated loans to NFCs in the euro area of about €520 billion in December 2012 (see Chart 8). The data reflect the amounts actually disbursed by lenders (each participating MFI reports the loan vis-à-vis the actual borrower), unlike other data which show the amount of the syndicated loan facilities. The exposures of MFIs in the four largest euro area economies (Germany, France, Italy and Spain) sum to about €420 billion. The average share of syndicated loans in the outstanding amount of euro area MFI loans in each euro area country exceeds 10% on average. For the MFIs in the four largest euro area economies, syndicated loans represent 10-20% of total assets of MFIs.

Syndicated loans can be categorised into two groups based on credit quality: investment-grade syndicated loans and leveraged loans. In investment-grade syndicated loans, the borrowers are usually rated BBB- (Standard & Poor's), Baa3 (Moody's) or higher. The leveraged loans could be

67 Fitzgerald (2011) points out that the corporate sector accounts for around 79% of western European primary market volume since 2000.

Chart 8 Outstanding amounts of syndicated loans by euro area MFIs to NFCs in the euro area (December 2012)

(EUR billion; percentages)



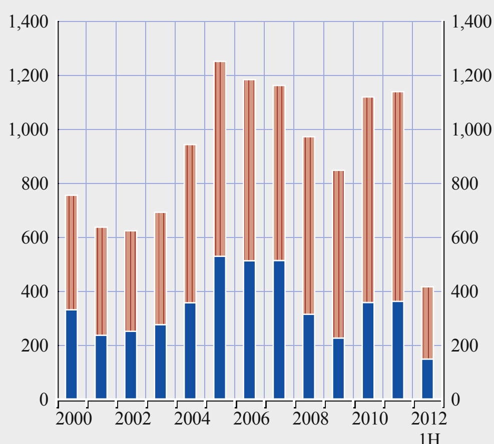
Source: ECB.

Chart 9 Signed syndicated loan facilities extended to debtors in the euro area

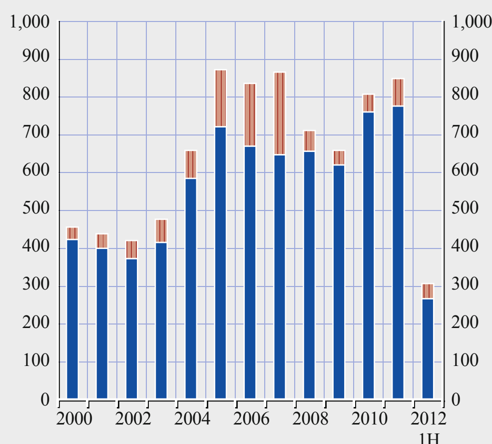
(EUR billion; number of contracts)

leveraged
investment grade

a) Leveraged vs. investment grade lending (signed amount)



b) Leveraged vs. investment grade lending (signed number of contracts)



Source: Dealogic.

loans to borrowers rated BB+, Ba1 or lower, or loans with a spread of around 125-150 basis points or higher above EURIBOR.[68] As the Eurosystem applies a credit threshold of BBB- in the S&P and Fitch rating scales (or equivalent in the rating scales of Moody's and DBRS),[69] the leveraged loans are not eligible in principle. The investment-grade syndicated loans account for around 35-40% of newly signed syndicated loans (in terms of the total amount) to debtors located in the euro area (see Chart 9). If compared in terms of the number of contracts, the investment-grade loans account for about 90% of total syndicated loans in the euro area.

Table 6 shows the country breakdown of the investment-grade syndicated loans newly signed in the euro area. Summing up the contracts signed between January 2009 and June 2012, the relatively active borrowing in France and Spain is evident. In terms of the amount of the facilities signed, France comes on top with €285 billion, followed by Germany (€224 billion), Spain (€219 billion) and the Netherlands (€101 billion). As regards the number of contracts, Spain comes first with about 650 contracts, followed by Germany, France and Italy. While the data imply the existence of a sizeable syndicated loan market in the euro area and potential demand for their use as collateral in some jurisdictions, the figures do not necessarily reflect the actual usage of the lending as the data refer to facilities. Some of the syndicated loan facilities might not be drawn or activated as the motivations of borrowers to use the facilities can be diverse. These include general corporate funding (e.g. working capital, and capital and operational expenditures), backstop facilities and funding for mergers and acquisitions.

68 Standard & Poor's (2012) points out that various definitions exist for leveraged loans.
69 The credit threshold of the Eurosystem is defined as credit quality step 3 in the Eurosystem harmonised rating scale. The credit quality step 3 means a minimum long-term rating of BBB- by Fitch or S&P, of Baa3 by Moody's, or of BBB by DBRS.

Table 6 Signed investment-grade syndicated loan facilities extended to debtors in the euro area

	2009		2010		2011		H1 2012		Total (2009 to H1 2012)	
	A	B	A	B	A	B	A	B	A	B
AT	253	3	4,786	6	4,035	8	820	3	9,876	20
BE	8,744	18	23,498	23	19,099	43	15,319	11	66,660	95
CY	366	3	0	0	423	2	0	0	789	5
EE	0	0	221	1	0	0	0	0	221	1
FI	4,218	19	5,823	21	13,225	31	2,147	5	25,413	76
FR	44,888	92	82,254	113	128,518	140	29,276	49	284,936	394
DE	61,925	70	66,296	106	70,910	154	24,553	75	223,684	405
GR	2,047	7	1,650	18	3,689	20	203	1	7589	46
IE	4,471	25	4,985	13	4,419	12	1,867	10	15,742	60
IT	10,477	92	40,578	125	22,029	104	13,895	26	86,979	347
LU	10,868	8	12,723	14	12,572	12	3,148	4	39,311	38
MT	0	0	589	3	42	1	0	0	631	4
NL	16,322	50	33,311	61	38,947	71	12,439	25	101,019	207
PT	3,954	16	6,361	22	2,328	7	800	1	13,443	46
SK	1,043	2	300	2	85	1	0	0	1,428	5
SL	970	6	1,309	9	1,133	8	0	0	3,412	23
ES	56,731	210	74,707	224	41,691	163	45,783	57	218,912	654

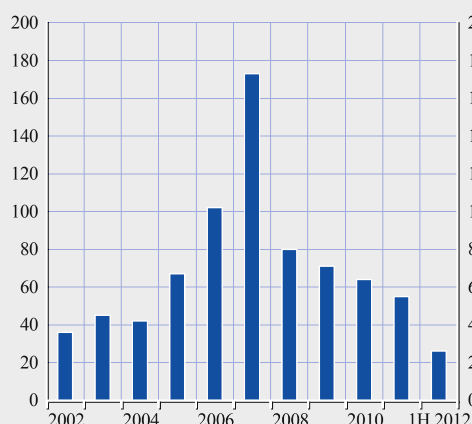
Source: Dealogic.
Notes: Column A shows the value of syndicated loan facilities (EUR millions). Column B indicates the number of deals.

In addition to the overall size of the market, the existence of secondary market transactions is another feature of the syndicated loan market that is different from other types of credit claim. The activity in the secondary market, however, is not that significant, especially since the Lehman Brothers bankruptcy in September 2008 (see Chart 10). The trading volume peaked in 2007 at about €170 billion and stood at about €60 billion in 2011. Another drawback in terms of liquidity could be

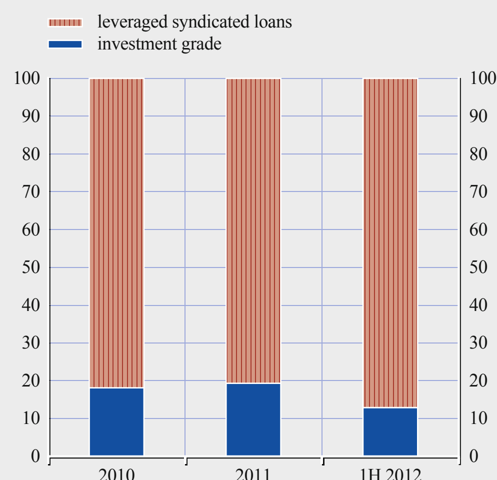
Chart 10 Secondary market transactions in syndicated loans in the European market

(EUR billion; in percentages)

a) Syndicated loan secondary market trading in Western Europe



b) Share of non leveraged syndicated loan transaction



Source: Thomson Reuters LPC Secondary Loan Trading Volume Survey.

the composition of the trading. The investment-grade syndicated loans account for less than 20% of secondary market transactions conducted in recent years.

6.2 THE USE OF SYNDICATED LOANS AS COLLATERAL

It is worth investigating the use of syndicated loans as collateral, given the sizeable primary market and the existence of a secondary market. The General Documentation stipulates that "the share of a syndicated member institution in a syndicated loan is considered an eligible type of credit claim", so syndicated loans are eligible as collateral for Eurosystem credit operations. However, there are basically no other requirements stipulated in the General Documentation specifically related to syndicated loans, which means that the requirements applied to other credit claims are also relevant for syndicated loans.

6.2.1 ROLE OF THE AGENT IN THE SYNDICATED LOAN SCHEME

The most visible difference in the structure of syndicated loans compared with other credit claims is the number and type of involved parties. Once a syndicated loan is signed, the typical syndicated loan scheme involves the agent bank, multiple lenders and the borrower. Depending on the structure of the syndicated loan, a security trustee performs the function of the agent and an SPV is also often used as a device acting on behalf of the debtor (in this case the debtor guarantees the SPV). Hence, the syndicated loan agreement or the related legal documents need to cover at least four dimensions of legal relationships between: (i) the borrower and the syndicated banks; (ii) the borrower and the agent; (iii) the agent and the syndicated banks; and (iv) multiple lenders.

The functions played by the agent are important for the operations in the syndicated loan scheme. Each lender normally has an individual credit claim against the debtor from a legal perspective. However, most of the actions against the debtor are supposed to be taken only via the agent who performs several legal or administrative tasks on behalf of all lenders. The Loan Market Association describes the agent as having four different roles:[70] (1) point of contact; (2) monitor of the debtor; (3) record-keeper and postman; and (4) paying agent. The agent maintains contact with the borrower and represents the views of the syndicate members. Monitoring is also an important function of the agent as the syndicated loan typically contains provisions or covenants to impose some regulations on the behaviour of debtors. These provisions include for example negative pledge covenants (preventing a debtor from pledging assets with other creditors) or other financial compliance covenants aiming to maintain the debtor's financial soundness. These provisions make the role of the agent in monitoring the debtor important. While investment-grade syndicated loans normally contain fewer covenants than leveraged loans, anecdotal evidence suggests that creditors are keen to incorporate more covenants, especially in times of financial market stress. As a record-keeper, the agent provides notifications of any related administrative matters or information on payments due. The role as a paying agent is also important. It requires the operational efficiency and more importantly the financial soundness of the agent. Under the usual syndicated loan scheme, the borrower is required to make any payments of interest or principal to the agent who would distribute them to the syndicated lenders. The lenders also advance funds to the borrower through the agent. In light of the importance of the roles of the agent bank, the lead arranger[71] of the syndication typically becomes an agent bank after all syndicate members have signed the loan contract. The lead arrangers are normally large banks with strong reputations in the market. Sufi (2007), for instance,

70 Loan Market Association (2011).

71 The lead arranger takes the lead in advising the borrower about the types of facility and in negotiating the broad terms, such as the pricing and the composition of the syndicate.

points out that the reputation of the lead arranger could mitigate the information asymmetry problems inherent in a syndicated loan transaction with regard to the borrower's profile.

6.2.2 TRANSFERABILITY OF SYNDICATED LOANS

The transferability of syndicated loans also requires special consideration when assessing the eligibility of this asset type. The General Documentation requires full transferability, unless the national legislation specifically provides for the privileged position of the Eurosystem with respect to mobilisation, as pointed out above. The eligibility requirement on transferability creates uncertainty over syndicated loan eligibility, as most of the syndicated loans traded in European financial markets contain provisions restricting transferability in the form of the debtor's consent as a precondition for mobilisation. This approach towards transferability can be observed in the standardised documentation for syndicated loans prepared by the LMA. While the LMA documentation is non-binding per se, it is thought that most European syndicated loans are more or less structured based on the LMA documentation. With regard to transferability, the LMA's syndicated loan documents provide that the consent of the debtor is required as a condition of assignment or transfer, with the exception where the transfer is made to other syndicated loan lenders.[72]

The restriction on transferability reflects the particular characteristics of the syndicated loan, which is sometimes described as a hybrid instrument combining features of relationship lending and publicly traded debt.[73] While ensuring secondary market transactions aiming to attract possible lenders to syndications, some syndicated loans might allow debtors an opportunity to reject the transfer to certain lenders, which possibly threatens the long-term relationship between lenders and the borrower, provided the rejection is not deemed "unreasonable". In addition to these restrictions on transferability, syndicated loans normally contain other provisions that do not usually appear in other types of credit claim, such as majority voting requirements of lenders on transferability or on other decisions concerning terms and conditions of the syndicated loan (in particular, decisions on enforcement actions). Furthermore, syndicated loans may involve the completion of additional formalities in comparison to other credit claims, for example, requiring transferees to accede to an inter-creditor agreement or to agree to confidentiality undertakings (such as the LMA model confidentiality agreement).

72 "The consent of the Company is required for an assignment or transfer by an Existing Lender, unless the assignment of transfer is: (i) to another Lender or an Affiliate of a Lender [; or (ii) made at a time when an Event of Default is continuing]" (Loan Market Association, Multicurrency Term and Revolving Facilities Agreement, Section 9, 24.2).

73 Gadanecz (2004) and Dennis and Mullineaux (2000).

7 CONCLUSION

Several measures have been taken to reduce the legal and operational challenges involved in the use of credit claims as collateral for Eurosystem credit operations. These measures include: (i) the increased automation of credit claim collateralisation procedures by some NCBs; (ii) the introduction by the Eurosystem of the CCBM framework for the cross border use of credit claims; (iii) the revision of the EU's Financial Collateral Directive; and (iv) several private initiatives, such as documentation standardisation and the enhancement of post-trade services by the ICSDs. While these have been contributing to reducing the cost of credit claim use as collateral in general, there are still considerable obstacles enshrined in the current traditional legal framework.

Credit claims have been gaining importance as collateral in the euro area. In the light of the increased usage of and demand for credit claims since 2007 when credit claims were included in the Eurosystem's single list of eligible collateral, it could be worth revisiting the practices regarding the use of credit claims, with a view to further facilitating their use.

Among the credit claims that are eligible as collateral under the single list, syndicated loans are different from other credit claims in several ways. The profile of the debtors typically means a high likelihood that credit ratings will be available. Furthermore, secondary market transactions in syndicated loans have been common globally as well as in the euro area. The existence of the secondary market could also facilitate valuation compared with other credit claims. While these are positive elements for syndicated loan transactions, syndicated loans may not be actively used as collateral either in private transactions or in Eurosystem credit operations as suggested by some counterparties. The possible limited usage of syndicated loans could be the result of several factors, such as the distinctive structure of the loans compared with other types of credit claim. It could be useful for the Eurosystem to further study these factors and the impact that they have on the syndicated loan market.

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